

Enquiry N°:
Created by: JD

SERVO MOTOR142LDA205FGCJG165900-SGV4

142LDA205FGCJG165900-SGV4



Definition

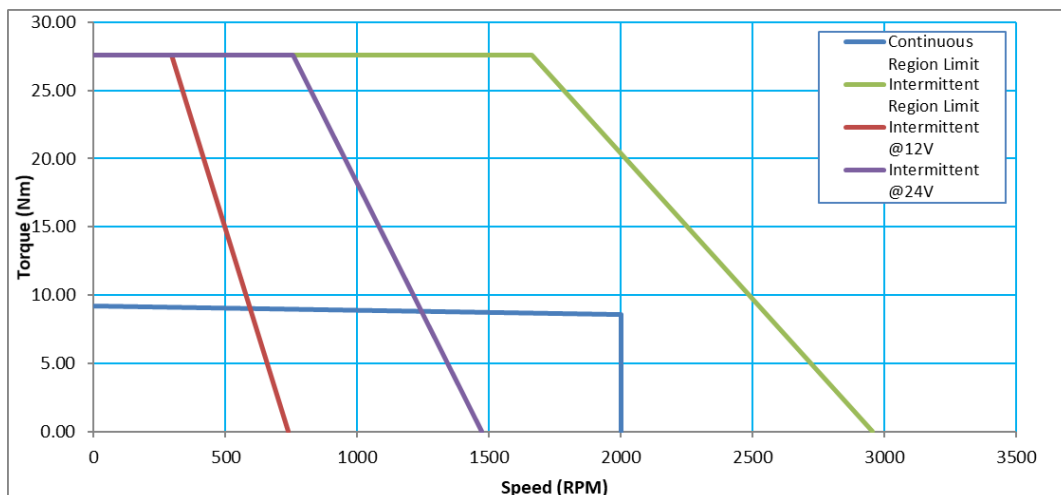
Type	Unimotor HD	
Frame Size (mm)	142	
Voltage	L	40-50V DC
Magnet type	D	D - High dynamic
Frame Length	A	
Speed (min-1)	20	2000
Brake	5	Braked
Connection type	F	Flying Leads
Output shaft	G	Gearbox output
Feedback device code	CJ	CJ – Renco R35i encoder 4096 5PP push-pull comms
Inertia & thermistor	G	Standard Inertia + no thermistor
PCD (Gbox)	165	108/165
Shaft Diameter (Gbox)	900	Gearbox mounting
Insulation class	F	
UL Motor / UL Stator	UL Stator	

Nominal characteristics

Motor Ambient Temperature (°C)	40	Drive Fsw (kHz)	12
Motor Peak Torque (N.m)	27.6		
Motor Stall Torque (N.m)	9.2	Stall Current (A)	51.70
Rated Torque (N.m)	8.6	Rated Current (A)	48.33
Rated Power (kW)	1.8	Kt (Nm/A)	0.18
Winding Thermal Time Constant (s)	235	Ke (V/kmin-1)	10.90
Number of Poles	10	R (ph-ph) (Ohm)	0.02
Maximum Cogging (N.m)	0.05	L (ph-ph) (mH)	0.22
Inertia (kg.cm ²)	6.2		
Ingress Protection Level (IP)	IP54	Weight (kg)	~19

Brake	Parking	Static Torque (N.m)	20
Release Time (ms)	85	Backlash (°)	0.6
Brake Supply Voltage (V)	24	Brake Coil Power (W)	25

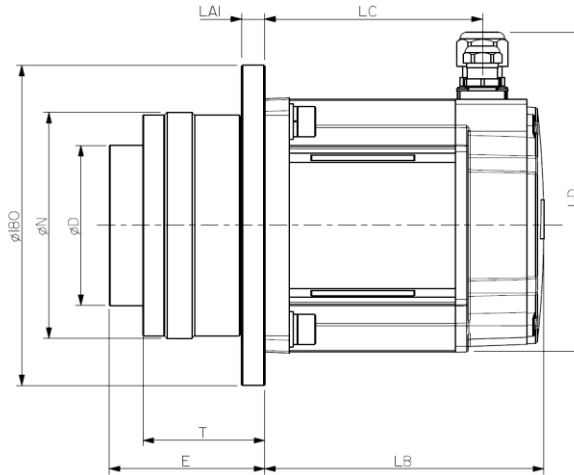
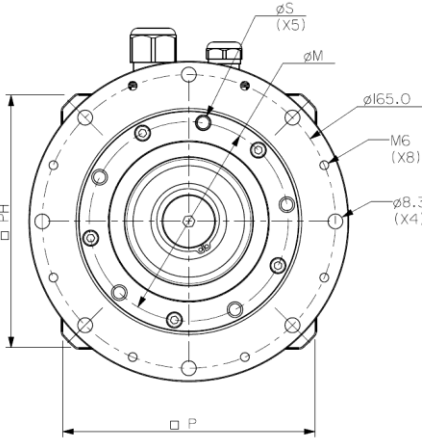
Torque / speed graph



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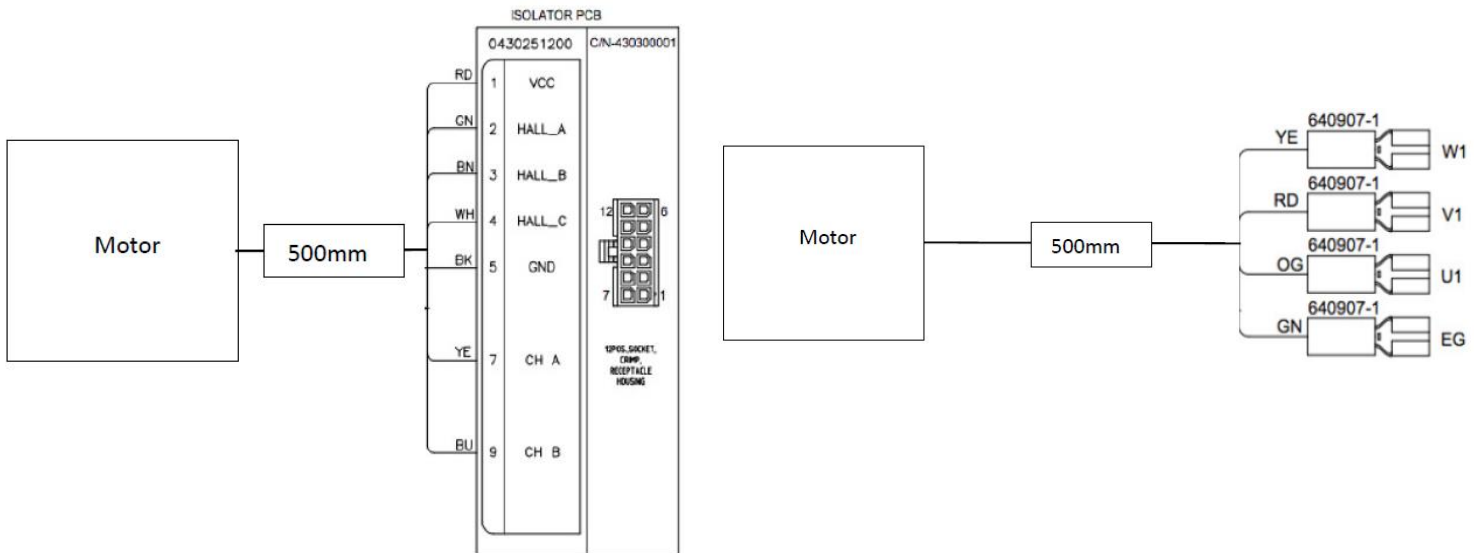
Motors (° & mm)



LB	Total length	174.6
LC	Power connector position	139.7
LA	Flange thickness	14
T	Length to G'Box mounting	68.5
N	Register Diameter	127 (h7)
LD	Connector overall height	179.5
P	Flange Square	142
S	Fixing Hole Diameter	M8 (\downarrow 28)
M	Fixing hole PCD	112
PH	Motor Housing Width	142
D	G'Box Diameter	90
E	G'Box Length	87.5
LC1	Brake connector position	28
E+LB	Toltal Length Motor+GBox	262.1
	Mounting Bolt	M8

Motor electrical interface 0.5m flying leads option:

Feedback device code:					Connection type:			
CJ – Renco R35i encoder 4096 5PP push-pull comms								
1	Red	Power	7	Yellow	CH A	1	U	Orange (x 1)
2	Green	HALL A	8		-	2	V	Red (x 1)
3	Brown	HALL B	9	Blue	CH B	3	W	Yellow (x 1)
4	White	HALL C	10			4	Earth	Green/Yellow (x 1)
5	Black	GND	11					
6	Red		12					
SIG Cable (28 AWG): 500mm (from gland to customer end) 12-Way MOLEX Connector 43025-1200					PWR Cable: 500mm (from gland to customer end) 8 cores of 12 AWG UL 1330 wire, with polyolefin heatshrink sleeve 16 Spade terminals fitted to lead wires			



Version V1.0

The information contained in this data-sheet is for guidance only and does not form part of any contract. The accuracy cannot be guaranteed as our company have an ongoing process of development and reserve the right to change the specification of their products without notice.

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Gearbox

Gear Box characteristics

Ratio	9	Backlash (arc/min)	≤8
Stages	1	Radial Load Max (Fr, N) @ E/2 and Fa=0	10000
Inertia (kg.cm ²)	~72	Axial Load Max (Fa, N) @ Fr=0	3800
Weight (kg)	6.6		
Efficiency %	95		

